

9 Dec 1988

TS7NN-B
TEST SET, LORAN

1. GENERAL. This procurement requires a test set that generates master and slave pulses synchronized with the repetition rate of any C or CS LORAN station.

2. CLASSIFICATION. Type II, Class 6, Style E, and Color R in accordance with MIL-T-28800 for shipboard applications.

3. OPERATIONAL REQUIREMENTS. The equipment shall be capable of LORAN signal generation within the minimum specifications identified below.

3.1 Frequency. Selectable frequencies of 100 kHz, 1,850 kHz, 1,900 kHz, and 1,950 kHz shall be provided. Accuracy: $\pm 0.001\%$.

3.2 Attenuator range. 0 dB to 60 dB in 10 dB steps. Accuracy: $\pm(1\% \text{ of reading} + 0.1 \text{ dB})$.

3.3 Output level range. 5 μVrms to 5 mVrms into 50 ohms. Additionally, an uncalibrated output with a typical 1 Vrms level, regardless of the attenuator setting, shall be provided.

3.4 Pulse delay. 0 to 99,999 μs . Accuracy: $\pm 1 \text{ } \mu\text{s}$.

3.5 Pulse rate. Adjustable repetition interval from 29,300 to 100,000 μs .

3.6 Connectors. BNC female.

3.7 Antenna. A switch shall be provided to permit the output signal to be radiated by an integral antenna.

4. GENERAL REQUIREMENTS.

4.1 Power source. MIL-T-28800 nominal and dc internal power source requirements are invoked as detailed below.

4.1.1 Nominal power source. Operation at 400 Hz is not required. Maximum power consumption: 35W.

4.1.2 DC internal power source. Internal batteries and charger are required. Minimum operating time shall be 2 hours following a maximum recharge time of 14 hours.

4.2 Weight. 20 kg (44 lb) maximum.

4.3 Lithium batteries. Per MIL-T-28800, lithium batteries are prohibited without prior authorization. A request for approval for the use of lithium batteries, including those encapsulated in integrated circuits, shall be submitted to the procuring activity at the time of submission of proposals. Approval shall apply only to the specific model proposed.